# City of Bremen
# 2006 Annual Water Quality Report
# System I. D. # GA 1430000

The City of Bremen is pleased present you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with safe and dependable supply of drinking water. We want you to understand the efforts we make to improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source comes from surface water reservoirs located on the Beech Creek and Bush Creek basins. The Beech Creek surface reservoir is located at our Water Treatment Plant on Waterworks Road and the Bush Creek surface reservoir is located off the Asa Cash Rd. The City also purchases water from the Haralson County Water Authority which distributes its water from the Tallapoosa River.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. The water can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in water include the following:

- Microbial substances, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic substances, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic discharges, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff and residential uses.
- Organic chemical substances, including synthetic and volatile organic chemicals, which are by-products of industrial processes and can come from gas stations, urban storm runoff and septic systems.
- Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.

All drinking water, including bottled water, can be expected to contain at least small amounts of contaminants. The presence of contaminates does not necessarily indicate the water poses a health risk. In order to ensure that tap water is safe to drink, The Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminates in water provided by public water systems. The Food and Drug Administration (FDA) regulates established limits for contaminants in bottled water which must provide protection for public health. More information about contaminates and potential health effects can be obtained on the EPA web site or by calling their Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminates in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV+/AIDS or other immune systems disorders, some elderly and infants can be particularly at risks from infections. These people should seek advice about drinking water from their health care providers. EPA and/or Centers for Diseases Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium

and other microbial contaminants are available from their respective web sites or from the Safe Drinking Water Hotline (800-426-4791).

Last year, we conducted tests for many contaminates. We detected ten of those contaminants and found none of those at a higher level than the EPA guidelines. However certain testing was not performed properly (see violations section at the end of this report for more information). We have made adjustments and changes in our testing procedures to ensure compliance. We are committed to providing you with information and encourage you to participate as informed consumers are our best allies. You are encouraged to be present at our City Council meetings at 7:00 p.m. on the second Monday of each month at the Bremen Seniors Building.

If you have any questions regarding this report or concerns regarding your water, please contact Michael McLeroy at the Water Treatment Plant (770-537-5782) or Mike Thompson, (E-mail address, mthompson@bremenga.gov) at City Hall (770-537-2331). Our mailing address is 232 Tallapoosa St. Bremen, GA 30110. This report is available to be viewed on the City of Bremen web site, www.bremenga.gov, the Bremen City Hall or the Warren Sewell Memorial Library.

A Source Water Assessment Plan Report contains the categories of potential pollution sources. This report will reveal sources such as animal feed lots, NPDES storm water and mining, hazardous wastes facilities, Las permit holders, and roads that cross over streams. This report may be viewed at the same locations as above.

**VIOLATIONS:**

Our water system had a one month positive sampling for Coliform bacteria. We believe this violation was from unsanitary water sample containers, not from the distribution system, as all other previous samples and samples collected since this violation, have been negative.

Our water system violated a drinking water standard from 5/21/1998 through 1/27/2006. We are required to continuously monitor for the residual disinfectant concentration of the water entering into the distribution system. During that period, proper records to document this continuous monitoring are not present. We failed to continuous monitor for residual disinfectant concentration in the water and/or maintain proper record retention. Therefore, we cannot be sure of the quality of our drinking water during that period. We have made corrections to ensure proper monitoring and record retention.

Our system violated the water standard for lead and copper monitoring for the years of 2003, 2004, 2005 and 2006. In the year of 2006, we were required to submit twenty water samples for lead and copper testing. We only submitted sixteen samples. Therefore, all of the submitted samples were declared invalid. We will ensure that twenty samples will be collected for testing per present guidelines.

The City is under consent orders for these violations. Even though this is not an emergency, as water consumers, you have a right to know what is being implemented to correct these violations.

## Water Sampling Quality Data Table

The table below lists all of the drinking water substances that we detected during the calendar year of this report. The presence of substances in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of this report. We are required to test and monitor for these substances per E.P.A. and E.P.D. guidelines. The E.P.A or the E.P.D. requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. Although the substances listed here are under the Maximum Contaminate Level (MCL), we feel that as consumers, you know exactly what was detected and how much of the substances were present.

| Substances | Year Sampled | MCLG [MRDLG] | (AL) MCL [MRDL] | Bremen water system maximum | Range Low/High | Violation | Typical Source |
|---|---|---|---|---|---|---|---|
| Total Coliform Bacteria | 2006 | 0% positive | >5% positive | One monthly violation | N/A | yes | Naturally occurring |
| Fecal Coliform Bacteria | 2006 | 0% positive | O% positive | One monthly violation | N/A | yes | Human and animal waste |
| Filtered Turbidity * (NTU) | 2006 | NA | TT<=0.5 | 0.04 | 0.02./ 0.28 | no | Soil runoff |
| Sodium | 2006 | MRN | MRN | 2.8 | N/A | no | Erosion deposits |
| Nitrate | 2006 | 10 | 10 | 0.21 | N/A | no | Soil runoff-Fertilizers |
| Fluoride (PPM) | 2006 | 4 | 4 | 0.72 | 0.61/ 0.88 | no | Water Additive |
| TTHMs Trihalomethanes | 2006 | N/A | 80 | 48.5 | 48/ 66 | no | By-product of Chlorine |
| Total Organic Carbon mg/l | 2006 | N/A | TT | 1.22 | 0.79/ 1.70 | no | Natural in environment |
| Chlorine (PPM) | 2006 | [4] | [4] | 1.6 | 0.28/1.80 | no | Water additive |
| Halo acetic acids | 2006 | N/A | 60 | 33.8 | 22/ 45.5 | no | By-product of Chlorine |

* Turbidity is a measurement of the cloudiness of water. It is a good indicator of the effectiveness of the filtration system.

| Substances | Year Sampled | MCLG | AL | Amount detected 90$^{th}$ percentile | Homes above AL | Violation | Sources of contaminants |
|---|---|---|---|---|---|---|---|
| Lead (PPB) | 2006 | N/A | 15 | 0 | 0 | yes | Corrosion in household plumbing |
| Copper (PPM) | 2006 | 1.3 | 1.3 | 0.0104 | 0 | yes | Corrosion in household plumbing |

Table of Definitions:

**MNR:** monitoring not required

**AL** (action level): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**MCL** (maximum containment level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

**MCLG** (maximum containment level goal): The level of a contaminant in drinking water below which there is no known risk to health. MCGLs allow for a margin of safety.

**MRDLG** (maximum residual disinfectant level goal): The level of a drinking water disinfectant below which there is no known risk to health. MRDLGs do not reflect the benefits of the disinfectants to control microbial contaminants.

**N/A:** Not applicable

**NTU** (Nephelometric Turbidity Units): The measurement of the clarity, or turbidity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**PPB** (parts per billion): One part substance per billion parts water (or micrograms per liter).

**PPM** (parts per million): One part substance per million parts water (or milligrams per liter).

**TT** (treatment technique): A required process intended to reduce the level of a contaminant in drinking water.